

REMARKS

Claims 1-51 were filed with the application. Claims 1-11, 19, 23-32, 36 and 44-51 have been withdrawn based upon a restriction requirement. Claims 12-22, 33-35 and 37-43 remain under consideration at the time of the present action. Claim 16 was previously cancelled.

Appreciation is expressed to the Examiner for the time spent during the interview of August 1, 2006. It is believed that the amendments and arguments presented herein are in conformance with the discussion during the interview.

ARGUMENTS

In the present action, claims 33-35 are objected to as being indefinite. It is the Examiner's position that the claims lack clear antecedent basis for the term "the circumferential direction." As discussed during the interview, the circumferential direction is inherent in the formation of a cylindrical tube. However, in an effort to clarify the language, independent claim 33, as well as the other independent claims under consideration, have been amended to define the longitudinal dimension of the hole in the tube wall and the associated insert as extending in the circumferential direction of the tube wall. This claim language is clearly supported by the specification and drawings as filed. See, e.g., paragraph 71 and Figures 14 and 15. It is respectfully submitted that these amendments address the Examiner's concerns and that the objected to claims 33-35 are in proper form for allowance.

In the present action, Claims 12-15, 17, 18 and 20-22 stand rejected as being anticipated by Adams et al (US 4,853,823). In addition, claims 33-35 stand rejected as being obvious in view of Adams. It is respectfully submitted that Adams does not suggest or disclose the specific combination claimed.

The claims, as presently presented, define a yarn catch insert and/or its associated winding tube. The insert is elongated and is inserted into an elongated hole formed through the wall of the cylindrical tube. Both the insert and the hole in the tube include a longitudinally extended side surface. A portion of the side surface of the insert is positioned opposite the portion of the side surface of the hole, when the insert is inserted into the hole. These opposing surfaces of the insert and the hole form a start-up groove that is extended along a portion of the circumference of the tube (i.e., in a circumferential direction). The claims further limit the form of the extended start-up groove as being tapered in a circumferential direction. In the present invention, the yarn is passed over the

outer surface of the tube in a circumferential direction (transverse to the longitudinal axis of the tube) and in the direction of the elongated insert and hole that form the startup groove.

Adams shows a yarn tube having a circular hole formed in an end of the tube with a resilient insert positioned within the hole. A V-shaped notch is formed in an axial direction in the end of the tube. The notch communicates, again in an axial direction, with the circular opening. The yarn is caught by the resilient member after insertion in an axial direction into the V-shaped notch from the end of the tube. Thus, the start-up groove in Adams is not formed in the circumferential surface of the tube (inward of the end of the tube), but is formed in the axial end of the tube. Further, the circular hole in the tube is not elongated in the circumferential direction. The hole in Adams does not form, in combination with the resilient insert, a circumferentially directed groove. The V-shaped notch and the circular hole are positioned axially along the tube. Further, there is no tapered groove formed in Adams. Thus, the Adams reference does not suggest or disclose the specifically claimed combination.

For the reasons expressed above, it is respectfully submitted that Claims 12-15, 17, 18, 20, 22 and 33-35, as amended, are patentable in view of Adams.

Claims 37-40 and 43 stand rejected in the current Office Action based upon the combination of Dunlap (US 2,679,989) and either Powel et al (US 4,901,941) or Adams. This rejection is also respectfully traversed.

The yarn carrier of independent Claim 37, and its corresponding dependant claims, is defined by the inner and outer tubes that are disposed over one another. Each of the tubes has a longitudinal hole in the tube wall that extends in the circumferential direction. When the two tubes are positioned together, the two holes are substantially aligned.

The cited references do not include each of the features claimed. It is admitted in the office action that Dunlap does not suggest or disclose holes formed in the tube wall. Further, the openings in Powell -- identified in the present action as holes 25 and 110 -- do not extend circumferentially, but rather are axially extending. As discussed above, the Adams reference also does not suggest a circumferentially extending hole in a tube wall. Thus, the proposed combination does not include each element of the claims. Moreover, there is no suggestion in these references to further modify their structures to meet the claim limitations. There is no start-up groove shown in Dunlap. Powell does not include a hole in the sidewall of the tube for an insert that forms a start-up groove. The

holes in Powell are merely to locate the position of a ring on the inner tube member, with the ring then sandwiched into position by an end cap. The holes in Powell are formed differently from that claimed and are intended to perform a different function. Finally, at best, the hole and V-shaped notch in Adams extend in an axial direction and do not form a circumferentially extending start-up groove. In the high-speed winding operation of the present invention, the start-up groove is formed on the circumferential surface and the yarn is laid in a circumferential direction. This difference is significant. There is no suggestion to modify the operation of Adams to function in the manner claimed.

Dunlap, Powell and Adams do disclose each of the elements claimed. There is also no suggestion in the cited references to modify the disclosed structures to create the claimed combination. In order for a claimed invention to be rendered obvious, there must be some suggestion to combine the claimed elements or some suggestion of the advantages for making that combination. The cited references also do not suggest the advantages of or operation of the claimed invention.

Claims 41 and 42 stand rejected based upon Dunlap in combination with Powell or Adams, and in further view of Qiu et al (US 5,505,395). Without reference to the merits of the dependant claims, these two claims are patentable for the same reasons expressed above. The Qiu reference does not present any of the elements missing from the primary references. Qiu merely shows a multi layer tube, made of various materials. There is no hole in Qiu. The various layers are adhered to one another during the formation of the tube. There is no insert in Qiu. The start-up groove in Qiu is cut into the outside surface of the tube. The present invention is intended to replace the start-up groove construction of the type shown in Qiu. (See paragraphs 2-9 in the application as filed.)

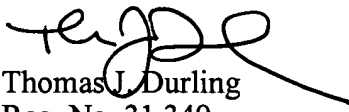
It is argued in the present action that the circumferential extension of the insert or hole is not specifically defined in the claim language. However, none of the references includes a longitudinally extending hole for receipt of a longitudinally extending insert. The "longitudinal" term is normally defined as being related to the length dimension. Both the hole and the insert are "elongated", meaning that dimensionally there is more length than width. This longitudinal extension is directed along the circumference of the tube. Moreover, it is the combination of the insert and the opening side surfaces, which are positioned adjacent one another, that form the start-up groove, which again extends in the circumferential direction. Adams receives the yarn in an axial direction. The insert and

hole do not form a circumferential extension, nor do they form an elongated, circumferentially positioned start-up groove. Dunlap does not have a groove. Powel's groove is formed by a ring fixed in position by an end cap. The hole in Powel is axial and does not form a part of the start-up groove. Qiu has a start-up groove *cut* into the sidewall of the tube and does not suggest that the groove can be formed by an *insert* positioned in a hole in the sidewall. Thus, individually the references do not meet the specifics of the claim language. In addition, there is no suggestion to combine the various elements of the references to form the claimed invention.

It is respectfully submitted that the claims as pending are in condition for allowance. (However, if further minor amendments are desired to bring about allowance of the claims as pending, please contact applicants' representative by phone.)

A notice of allowance is solicited.

Respectfully submitted,


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